

**APPLICATION TO BE CERTIFIED  
UNDER THE GENERAL PERMIT  
FOR CONCENTRATED ANIMAL  
FEEDING OPERATIONS**

**COLORADO DISCHARGE PERMIT  
No. COA-932000**

FOR AGENCY USE ONLY

PERMIT CERTIFICATION NUMBER

C O A - 9 3 2

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JAN 02 2013

ENVIRONMENTAL AGRICULTURE  
PROGRAM

**INSTRUCTIONS:**

- Type or print legibly.
- If an item is not applicable to your facility, please indicate this in the appropriate section.
- Attachments A, B and C must be included in order for the application to be deemed complete.
- Label each attachment/drawing with the name of the attachment/drawing and the name of the CAFO facility.

**I. Application Type:**

New ☐ Expansion ☐  
Renewal (re-certification from previous general permit) ☒  
Amendment ☐ Please describe: \_\_\_\_\_

**II. Permit Applicant Information:**

A) Facility Owner (please enter the name of a person(s), company, LLC, etc., as applicable):

Dyecrest Dairy, LLC

Mailing Address, City, State, Zip: 1137 N County Road 1, Fort Collins, CO 80524

Phone Numbers: (Office) (970) 484-9294 (Cell) (970) 481-0286

E-mail: ~~dyecrest@dyecrest.com~~ Fax: (970) 484-9254

B) Facility Operator (please enter the name of a person(s), company, LLC, etc., as applicable):

Dyecrest Dairy, LLC

*(Please note: The permit certification typically will be issued to the facility operator.)*

Mailing Address, City, State, Zip: 1137 N County Road 1, Fort Collins, CO 80524

Phone Numbers: (Office) (970) 484-9294 (Cell) (970) 481-0286

E-mail: ~~dyecrest@dyecrest.com~~ Fax: (970) 484-9254

C) Legal Contact Person: Terrence Dye Email: ~~dyecrest@dyecrest.com~~

Is this person also the registered agent for the company, LLC, etc? Yes ☒ No ☐ N/A ☐

If no, who is the registered agent? \_\_\_\_\_

Phone Numbers: (Office) (970) 484-9294 (Cell) (970) 481-0286 (Fax) (970) 484-9254

D) On-site Contact Person: Terrence Dye

Phone Numbers: (Office) (970) 484-9294 (Cell) (970) 481-0286 (Fax) (970) 484-9254

### III. Location and Facility Information\*:

A) Facility Name Dyecrest Dairy, LLC

B) Facility Location and County (e.g., 13270 Weld County Road 35, Weld County):  
1137 North County Road 1, Larimer County

Latitude at entrance of production area(s)

40.601887

WGS84 Datum.

Longitude at entrance of production area(s).

-104.944454

C) Legal Description: **N ½ of the SE ¼, and the NE ¼ of:**

(NE) ☐

(SE) ☐

(NW) ☐

(SW) ☐

Quarter, of the

(NE) ☐

(SE) ☐

(NW) ☐

(SW) ☐

Quarter, of the

Section 1, Township 7 (N)☒ (S)☐, Range 68 (E)☐ (W)☒

***\*Attachment A and Attachment B must be included with this application.***

### IV. Design and Discharge Information:

A) Maximum number of animals that will be confined in the production area for 45 days or more in a 12-month period (*include all animal types*):

Cattle (not dairy or veal): \_\_\_\_\_

Dairy Mature (incl. dry cows): 1,600

Dairy Heifers (weaned): 1,200

Veal Calves: \_\_\_\_\_

Sheep/lambs: \_\_\_\_\_

Horses: 2

Swine (over 55 lbs.): \_\_\_\_\_

Swine (under 55 lbs.): \_\_\_\_\_

Laying hens or broilers (with liquid manure system): \_\_\_\_\_

Laying hens (other than liquid manure system): \_\_\_\_\_

Chickens other than laying hens (other than liquid manure system): \_\_\_\_\_

Other (specify type and number): 400 calves

B) Total capacity of process wastewater storage (not including solids separating basins): 62.3(ac-ft)

C) Type of manure containment (*indicate type(s) used*):

Roofed storage shed: \_\_\_\_\_

Composting: \_\_\_\_\_

Impervious soil pad: \_\_\_\_\_

Pen storage: X

Concrete pad: \_\_\_\_\_

Other: \_\_\_\_\_

Stockpile: X

Describe: \_\_\_\_\_

**IV. Design and Discharge Information (continued):**

- D) Type of wastewater management system (not including solids separating basins) (*indicate number of each*):

Single-stage retention pond: 2      Two-stage retention ponds: 1  
Three-stage retention ponds:             Above ground holding tank:         
Below ground holding tank:             Under floor pit:         
Evaporation pond (designed for 10-year period of maximum rainfall):         
       Other (*please describe*):         
Number of solids separating basins: 1

**V. Wastewater and Manure Management Information:**

- A) Total number of land application sites: 3 fields  
B) Total acres owned by or under the control of applicant for land application: 61 acres  
C) Gallons of process wastewater produced per year (*estimate*): 19,863,876  
D) Estimated wastewater volume released to third parties: (*indicate % of total production*): 0%  
E) Tons of solid manure produced per year (*estimate*): 13,072 tons @ 46% moisture  
F) Estimated amount of solid manure released to third parties: (*indicate % of total production*) 100%

**VI. Certification of Design Calculations, Drawings, and Specifications**

- A) Existing facilities. Certify below as to design calculations, drawings, specifications, tables, and other relevant documents as required under section 61.17(5)(c)(ix) of Regulation No. 61. Certification must be provided by a professional engineer (P.E.) registered in Colorado.

Include a summary table providing the following information:

- 1) Impoundment name
- 2) Impoundment volume at two feet of freeboard or other approved freeboard level
- 3) Impoundment volume at spillway or impoundment overflow level
- 4) Volume of runoff from area tributary to the impoundment during the design storm event
- 5) Volume of process water runoff and storage (i.e. parlor water, etc.)
- 6) The storm event (25-year, 24-hour or Chronic) for which each impoundment was designed (that is, the storm event from which an impoundment will receive the greater volume of runoff)

## ***CERTIFICATION***

I, Chad Tevelde, being a duly registered professional engineer (P.E.) in the State of Colorado, do hereby certify the following:

- ☒ That the volume of process wastewater runoff generated for each impoundment was calculated as required in section 61.17(5)(c)(ix)(A) of Regulation No. 61.
- ☒ That drawings of each impoundment as required under Regulation No. 61, section 61.17(5)(c)(ix)(B) have been prepared.
- ☒ That a properly designed and constructed spillway is in place at each discharging impoundment, unless the Program has determined that a spillway is not required pursuant to 61.17(8)(a)(ii).
- ☒ That accurate, permanent depth markers are in place as required under 61.17(5)(c)(ix)(D).
- ☒ That two feet of freeboard, or other freeboard level approved by the Program, exists in each open surface impoundment and terminal tank, as required under 61.17(5)(c)(ix)(E).
- ☒ That clean water is diverted, as appropriate, from the production areas, manure stockpiles, and composting areas as required under 61.17(5)(c)(ix)(F).
- ☒ That structures used to divert process wastewater from the production areas are sized as required under 61.17(5)(c)(ix)(G).
- ☒ That all impoundments, tanks, manure stockpiles, or composting areas located within a 100-year floodplain are protected from inundation and damage from 100-year or smaller flood events.

Dated this 17th day of December, 2012.



Signed and Certified by:

[Signature], P.E.

***\*Please Note - Work prepared under the control and direction of the signatory P.E. must contain the P.E.'s seal. Work done by others that the P.E. did not control or direct must have an accompanying letter indicating that the P.E. has reviewed such work and that it meets the regulatory requirement.***

**VI. Certification of Design Calculations, Drawings, and Specifications (continued)**

- B) New facilities other than swine, poultry and veal calf CAFOs - Submit the certification and summary table specified above in VI.A), at least 60 days prior to the time the operator desires permit coverage. The balance of the permit application must be submitted at least 180 days prior to the time the operator desires permit coverage (e.g., prior to the time the operator desires to place animals on the operation).
- C) New swine, poultry and veal calf CAFO facilities - Submit the certification and summary table specified above in VI.A), at least 60 days prior to the time the operator desires permit coverage.

Also, certify:

- ☐ There will be no discharge of manure or process wastewater into surface water from the production area;

OR

- ☐ The CAFO utilizes storage structures that are designed, operated, and maintained in accordance with the requirements of Regulation No. 61, section 61.17(6)(b)(iv)(A) to meet the no discharge requirement. Submit documentation supporting the technical evaluation required by 61.17(6)(b)(iv)(A), if performed.

**VII. Nutrient Management Plan**

All CAFOs must develop and implement a Nutrient Management Plan (NMP) that meets the requirements of Regulation No. 61.17(8)(b). A complete NMP must be included within Attachment D of this application.

Has the CAFO developed and implemented a Nutrient Management Plan, including all terms of the NMP as required in Regulation No. 61, section 61.17(8)(b)(xii)?

☒ Yes      ☐ No

Does the CAFO operate according to the NMP?

☒ Yes      ☐ No

Was the NMP prepared or approved by a certified nutrient management planner?

☒ Yes      ☐ No

*(Note: The permit does not require CAFO owners or operators to use a certified nutrient management planner to prepare or approve nutrient management plans.)*

**VIII. Alternative Performance Standards (not applicable to new source swine poultry and veal calf CAFOs):**

If requesting alternative performance standards, provide the information required in section 61.17(7) of Regulation No. 61, and any additional information requested by the Program pursuant to Regulation No. 61, section 61.4(1)(k).

**IX. Additional Certification Requirements:**

By signing and submitting this application for coverage under the General Permit for Concentrated Animal Feeding Operations (Permit No. COA-932000), the applicant certifies:

- 1) That the CAFO facility is not a "Housed Commercial Swine Feeding Operation", as that term is defined at Section 25-8-501(2)(b), of Colorado Revised Statutes; or
- 2) The discharge is not to waters of the state for which there is an applicable control regulation that limits the quantity or concentration of total phosphorus or total nitrogen in discharges; and
- 3) That design calculations, drawings, specifications, and other relevant documents required in section 61.17(5)(d)(ix) of Regulation No. 61 are available at the location identified in the General Instructions section of this application or another site agreed to by the Program and will be provided to the Program upon request.

**X. Signature of Applicant:**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the facility, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

\_\_\_\_\_  
Signature of Applicant

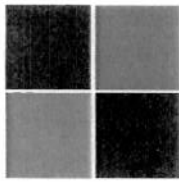
12-20-2012  
\_\_\_\_\_  
Date Signed

Terence Dye  
\_\_\_\_\_  
Name (printed)

Mgr. Owner  
\_\_\_\_\_  
Title\*

\* If the signer is an officer or owner of a company that operates or owns the facility, please so note.

Dycrest Dairy, LLC  
Terence Dye  
1137 North County Road 1  
Fort Collins, CO 80524



# AGPRO

## COMPLETE LAND & RESOURCE SOLUTIONS

### APPENDIX A, ENGINEERS NARRATIVE

Revised 6/13 DFI

#### Dyecrest Dairy

The Dyecrest Dairy is located east of Fort Collins, CO, approximately 2 miles north of highway 14 on the west side of North County Road. The facility is a dry lot dairy operation as typically seen on the Colorado Front Range.

The facility has two drainage basins: the Main Dairy Area and Compost Area. Main Dairy Area drains to the southwest into Settling Pond and Ponds labeled Lagoon 1, Lagoon 2, and Southwest Lagoon. The Compost Area drains to the west, northwest into the Compost Pond.

The milk parlor produces process wastewater that flows via pipeline into the Settling Pond and then into Lagoon #2 and then Lagoon #1, via culverts. Wastewater is normally pumped into the evaporative Southwest Lagoon. A spillway conveys any potential storm overflow from Lagoon 1 to the Southwest Lagoon. The Southwest Lagoon was expanded in the northeast corner in the spring of 2013. This increased the storage capacity of the pond by 1.1 acre-feet. The Southwest Lagoon and Compost Pond both have emergency spillways that will be the point of potential discharge sampling and measurement. Emergency spillways have been designed to accommodate flows in excess of those expected during a 25-year, 24-hour storm.

It has been calculated, using historical data, that maximum daily process wastewater generation is approximately 13,360 gallons per day. The Main Dairy pond system has adequate storage capacity for more than winter storage of process wastewater accumulation while still maintaining capacity for a regulatory storm.

Calibrated staff gauges are installed in a manner that does not compromise the integrity of the pond liners in Lagoon #1, Southwest Lagoon, and Compost Pond. These gauges are clearly marked in 1ft increments with the pump down and freeboard levels clearly marked with arrows.

Dyecrest Dairy controls stormwater run-on with the county road on the east and an up gradient irrigation ditch on the north, northeast. Both of these features will contain and/or divert run-on up to those flows expected during a 25-year, 24-hour storm. The southwest side, near the South land application field, is protected from runoff by a berm. The other sides of the facility are not affected by stormwater run-on, as the facility is higher in elevation than the surrounding terrain.

One wastewater diversion exists below the calf area and is sized and maintained to carry the 25yr-24hr storm event.

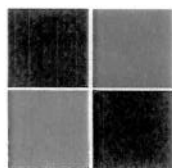
No mapped 100yr floodplain impacts this facility.

Pond capacity certifications are attached as separate documents for each individual basin, clearly indicating the working volume, volume at emergency spillway, drainage area, design storm, process water runoff and storage, and its corresponding runoff.

ENGINEERING, SURVEYING, PLANNING & CONSULTING

4350 Highway 66 □ Longmont, CO 80504

970.535.9318 / office □ 303.485.7838 / metro □ 970.535.9854 / fax □ [www.agpros.com](http://www.agpros.com)



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COMPLETE LAND & RESOURCE SOLUTIONS

## Pond Capacity Certification

Facility Name- Dyecrest Dairy

June 14, 2013

To the Best of my knowledge I certify that the below referenced ponds were constructed to the current requirements of Colorado Department of Public Health and Environment Regulation CCR 61.17.

Pond	Design Volume		Total Volume at		Contributing Watershed	Runoff from		Process Water	Applicable		
	W/2ft freeboard		Emergency	Spillway Crest		Area	Tributary*			Runoff and Storage	Design Storm
Lagoon 1	17.5	ac-ft	17.5	ac-ft	45 acres	15.33	ac-ft	20.97	ac-ft	10yr-10day Storm Event 5.24"	
Lagoon 2	1.5	ac-ft	1.5	ac-ft						10yr-10day Storm Event 5.24"	
Southwest Lagoon	17.3	ac-ft	17.3	ac-ft						10yr-10day Storm Event 5.24"	
Compost Pond	27.1	ac-ft	19.0	ac-ft	54.0	acres	18.9	ac-ft	8.2	ac-ft	10yr-10day Storm Event 5.24"

\* Includes direct precipitation from the pond surface

Calculations for Lagoon 1, Lagoon 2, and the Compost Pond were completed under the direct supervision of Roger T Sterling, P.E. in the State of Colorado and originally certified by such on July 8, 2008. AGPROfessionals has reviewed and added process water runoff and storage information.

Calculations for the Southwest Lagoon were completed under my direct supervision.

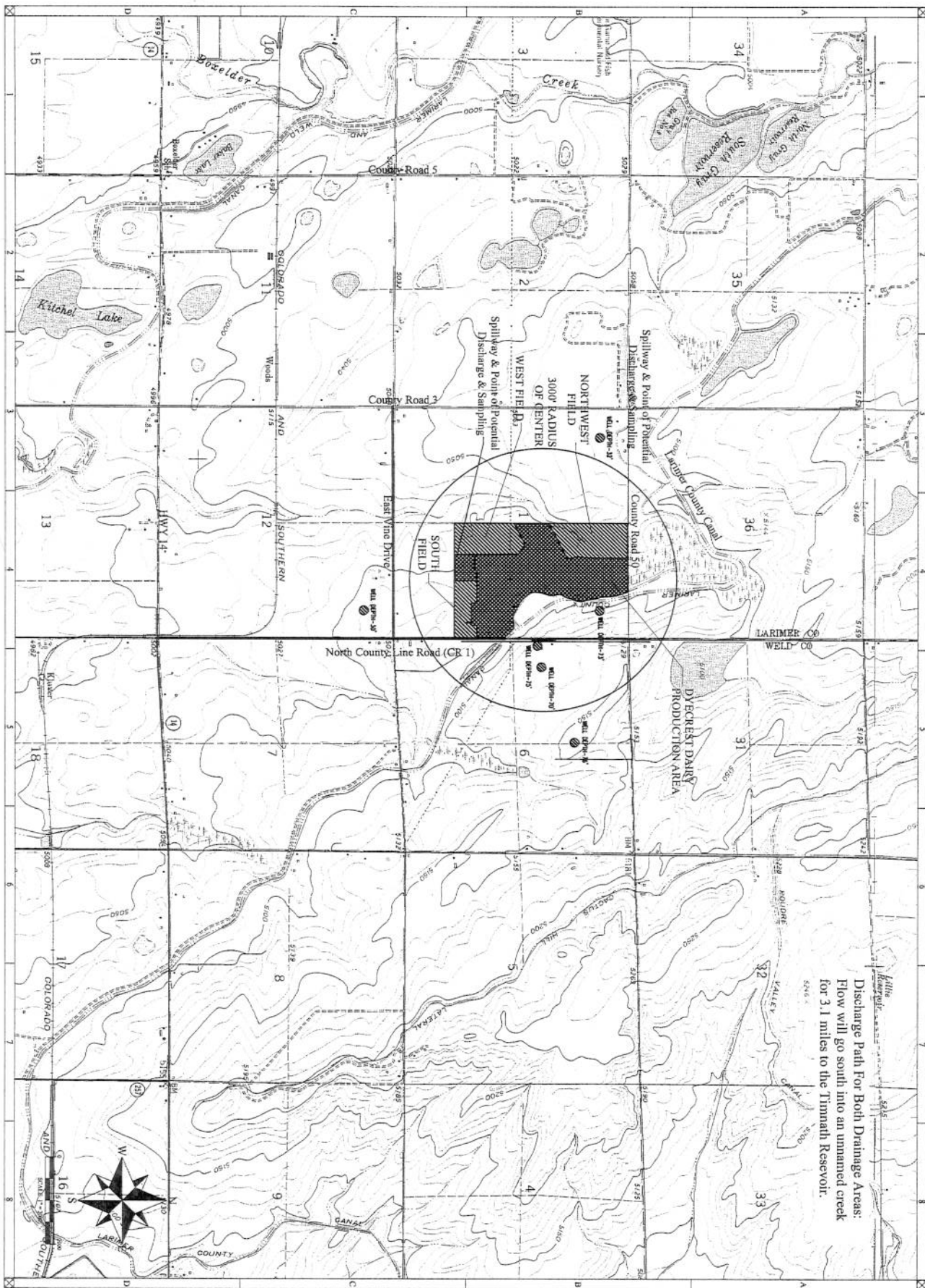


Chad TeVelde  
Professional Engineer

**ENGINEERING, SURVEYING, PLANNING CONSULTING**

4350 Highway 66 Longmont, CO 80504

970.535.9318/office 303.485.7834/metro 970.535.9854/fax www.agpros.com



Discharge Path For Both Drainage Areas:  
Flow will go south into an unnamed creek  
for 3.1 miles to the Tinnah Reservoir.

# DYECREST DAIRY CAFO ATTACHMENT A

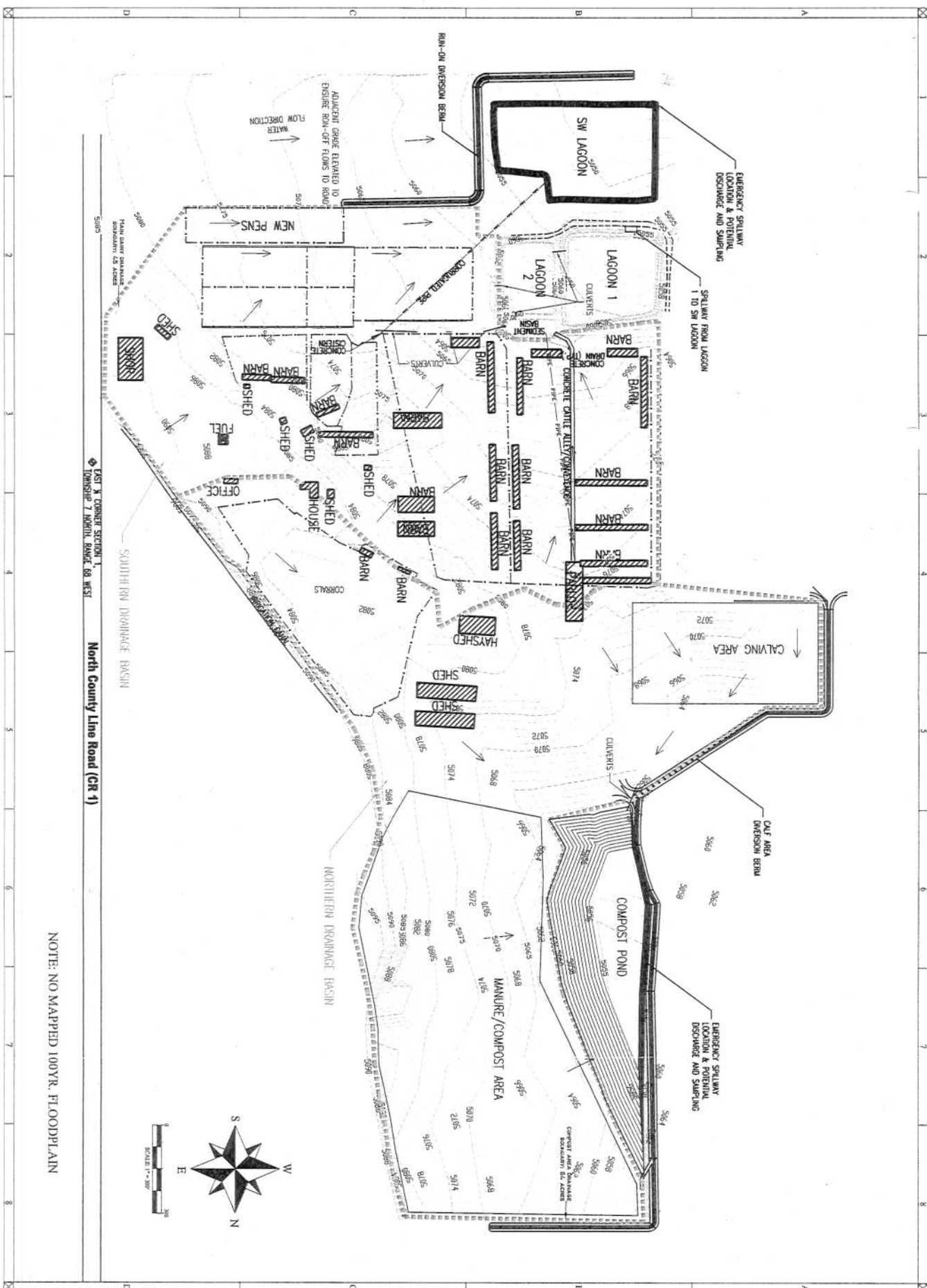
THE NORTHEAST 1/4 AND THE NORTH 1/2 OF THE SOUTHWEST 1/4 OF SECTION 1, TOWNSHIP 7 NORTH, RANGE 60 WEST, COUNTY OF LARIMER, STATE OF COLORADO



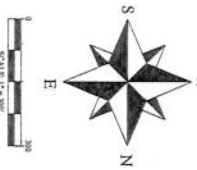
4350 Highway 66, Longmont, CO 80504  
(970) 535-9318 • Fax: (970) 535-9854

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1 OF 1  
DYECREST DAIRY  
CAFO ATTACHMENT A



JUST N CORNER SECTION 1  
TOWNSHIP 7 NORTH, RANGE 68 WEST  
North County Line Road (CR 1)



NOTE: NO MAPPED 100YR. FLOODPLAIN

# DYECREST DAIRY CAFO ATTACHMENT B

THE NORTHEAST 1/4 AND THE NORTH 1/2 OF THE SOUTHWEST 1/4 OF SECTION 1, TOWNSHIP 7 NORTH, RANGE 68 WEST, COUNTY OF LARIMER, STATE OF COLORADO

**AGPRO** Professionals, LLC  
 4350 Highway 66, Longmont, CO 80504  
 (970) 535-9318 • fax: (970) 535-9854

SHEET:  
**B**  
 1 OF 1  
 DYECREST DAIRY  
 CAFO ATTACHMENT B

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## **ATTACHMENT C**

### **Standard Operating Procedure for Precipitation Measuring and Recording**

The Colorado Department of Health & Environment General Permit for CAFOs requires that each permitted facility to implement a standard operating procedure per Subsection 61.17(5)(c)(xi) for measuring and recording precipitation at the permitted facility.

#### **General**

One precipitation gauge is located at the facility. It is installed where there will be no obstruction of precipitation reaching the gauge. The gauge is constructed and calibrated to measure precipitation to 0.1 inch and has a capacity of at least 5.0 inches. The gauge is located near the office.

#### **Inspection**

The rain gauge will be inspected on a routine basis (monthly) to ensure: 1) it is securely mounted and in proper working order, i.e., no cracks or breaks; 2) there is nothing obstructing the opening that would prevent precipitation from entering the gauge; and, 3) that any foreign material inside the gauge is removed. The inspection will be documented on the Facility Inspection checklist. Each time a precipitation measurement is taken each rain gauge will be observed for cracks, breaks or anything else that would prevent an accurate measurement.

#### **Measuring and Recording**

When a precipitation event begins an authorized person will record the date and time. The gauge shall be read at the end of each precipitation event or at least every 24 hours during long precipitation events. Each time a measurement is taken, the following information is recorded:

1. Date
2. Beginning and ending times of precipitation event (or amounts every 24 hours during long precipitation events)
3. Amounts of precipitation to the nearest 0.1 inch, including snow.

After the measurement is taken and information is recorded, the precipitation will be poured out of the gauge and placed back in its mount.

#### **Recordkeeping Requirements**

All precipitation measurements will be recorded on the precipitation log in the facilities' record keeping book. This information is to remain on-site for 5 years and be available for inspection and copying by the Director of Colorado Department of Health & Environment and/or authorized representatives.